

60,130-1052  
00MRA0213**REMARKS**

Reconsideration and allowance are respectfully requested. Claims 1-16 are currently pending and stand rejected. Applicant has amended claims 1, 2, 4, and 10. No new matter has been added.

**§ 112 rejection**

Claims 1-16 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Applicant has amended claims 1, 2 and 4 to correct the informalities helpfully noted by the Examiner. Amended claim 1 now recites the structural-cooperative relationship between the magnetic flux conduction member and the printed circuit board. Amended claim 2 clarifies that at least one metal pin can serve as the magnetic flux conduction member, and amended claim 4 clarifies that the connector may further comprise power contacts. The amended claims therefore obviate the rejection, and withdrawal of the rejection is respectfully requested.

**§ 102 rejections**

Claims 1-10 and 14-16 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,043,576 to Weber et al. ("Weber"). Applicant respectfully traverses this rejection.

Applicant has amended independent claims 1 and 10 to clarify that the claimed connector is adapted to be detachably fixed to the motor and that the magnetic flux conduction member is releasably interposed between the magnetic ring and the Hall-effect sensor when the connector is fixed to the motor. This detachable structure is described in the original specification at, for example, page 3, paragraph 18 and page 4, paragraph 20.

Weber does not disclose the claimed structure because it does not show a detachable connector or a releasable conduction member. Figures 1a and 1b are section views of portions of the electric motor, but the portions themselves are not releasably connected to each other. In fact, Figure 2 shows that the magnetic conductors 22, 24, 26 are permanently attached to taps 34, 36, 38, which are in turn permanent fixtures around the pole ring 20. Rather than viewing the magnetic conductors 22, 24, 26 as forming part of a detachable connector, Weber assumes that

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the Hall sensors 28, 30, magnetic conductors 22, 24, 26, taps 34, 36, 38 and the pole ring 20 are all part of its unitary electric motor 20 (see, e.g., Figures 1a, 1b and 2; col. 2, lines 16-61). Nothing in Weber remotely suggests that its conductors are releasably interposed between the magnetic ring and the Hall effect sensors, nor does Weber even mention a connector that can be detached from the motor.

Independent claims 1 and 10, by contrast, recite a connector that is adapted to be detachably fixed to the motor and that has a conduction member that is releasably disposed between the Hall-effect sensor and the magnetic ring. In other words, the conduction member can be released (e.g., when the connector is detached from the motor) so that it is no longer interposed between the magnetic ring and the Hall-effect sensor.

Because Weber fails to disclose a connector that is detachable from the motor and conductors that are not releasable from the motor, Weber fails to anticipate claims 1-10 and 14-16. Withdrawal of the rejection is therefore respectfully requested.

#### § 103 rejections

Claim 2 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Weber in view of U.S. Patent No 6,016,055 to Jager et al. ("Jager"). Applicant respectfully traverses this rejection. Claim 2 depends on independent claim 1 and is therefore patentable for the reasons explained above. Although Jager generally shows a metal pin, adding Jager to Weber still fails to suggest the claimed invention because Jager does not teach that the metal pin or any other conducting member is releasably interposed between any components. Further, Jager does not teach a connector that is detachably fixed to a motor. The Office Action therefore fails to establish a *prima facie* case of obviousness with respect to claim 2, and withdrawal of the rejection is respectfully requested.

Claims 11-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Weber in view of U.S. Patent No. 6,127,752 to Wiesler ("Wiesler"). Applicant respectfully traverses this rejection. Claims 11-13 depend on independent claim 10 and are therefore patentable for the reasons explained above. Adding Wiesler to Weber still fails to teach the claimed invention because Wiesler focuses on soldered pins or contact shows that are integrated into a component

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of the motor and not on a connector that is detachable from the motor. The Office Action therefore fails to establish a *prima facie* case of obviousness with respect to claim 3, and withdrawal of the rejection is respectfully requested.

Claims 1-5, 8-10 and 14-16 were rejected under 35 U.S.C. § 103(a) as being unpatentable over WO 98/27460 to Weber ("Weber-II") in view of U.S. Patent No. 6,107,713 to Hulsmann et al. ("Hulsmann"). Applicant respectfully traverses this rejection. Like the Weber reference described above, Weber-II assumes that the signal guidance system 14, 16, 18 (which the Office Action interpreted as being conduction members) are integral part of the motor and are not releasable or part of a detachable connector. Figures 3 and 4a in particular show that the signal guidance systems are integral parts of the motor and are not releasably attached to anything, nor does any part of the device shown in Weber-II detach from any other part.

Adding Hulsmann to Weber-II still fails to teach the claimed invention because the contact element 203 are not designed to be interposed between a magnetic ring and a Hall-effect sensor in a motor. Although Hulsmann shows electronic components attached to a printed circuit board, Hulsmann fails to show any structure corresponding to the claimed releasably interposed conduction member. The Office Action therefore fails to establish a *prima facie* case of obviousness with respect to claims 1-5, 8-10 and 14-16, and withdrawal of the rejection is respectfully requested.

Claims 6 and 7 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Weber-II in view of Hulsmann and further in view of U.S. Patent No. 5,453,649 to Blanchet ("Blanchet"). Applicant respectfully traverses this rejection. Claims 6 and 7 depend on independent claim 1 and are therefore patentable for the reasons explained above. The Office Action asserted that Blanchet shows the claimed power contact and metal pad. Applicant respectfully disagrees. The parts 94 that the Office Action asserts are power contacts are simply connection module 12 components that are connected to wires 92. Nothing in Blanchet teaches the claimed metal pad or magnetic ring. The Office Action therefore fails to establish a *prima facie* case of obviousness with respect to claims 6 and 7, and withdrawal of the rejection is respectfully requested.

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Claims 11-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Weber-II in view of Hulsmann and further in view of Wiesler. Applicant respectfully traverses this rejection. Claims 11-13 depend on independent claim 10 and are therefore patentable for the reasons explained above. As explained above, Weber-II, Hulsmann, and Wiesler all fail to teach the claimed detachable connector structure. The Office Action therefore fails to establish a prima facie case of obviousness with respect to claims 11-13, and withdrawal of the rejection is respectfully requested.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance, and a Notice to that effect is earnestly solicited. Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

Respectfully submitted,

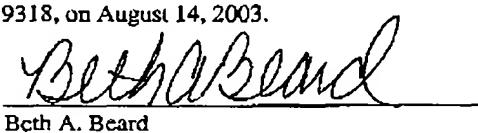


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**CERTIFICATE OF FACSIMILE**

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office, TC 2800, Before Final, (703) 872-9318, on August 14, 2003.

  
Beth A. Beard

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